

CLAIMS

We claim:

1. A polymeric ligating clip for use in a body having one or more surfaces coated with an antimicrobial or antibiotic coating composition.

2. The ligating clip according to claim 1 wherein the antimicrobial coating composition comprises silver ions.

3. The ligating clip according to claim 1 wherein the antimicrobial coating composition comprises at least one of the compounds selected from the group consisting of selenium, copper, silver acetate, silver benzoate, silver carbonate, silver iodate, silver iodide, silver lactate, silver laurate, silver nitrate, silver oxide, silver palmitate, silver protein, and silver sulfadiazine.

4. The ligating clip of claim 1 wherein the antibiotic coating composition is selected from the group consisting of oxacillin, aminoglycosides, erythromycin, ciprofloxacin, cephalosporins, quinolones and vancomycin.

5. A metal ligating clip for use in a body having one or more surfaces coated with an antimicrobial or antibiotic coating composition.

6. The ligating clip according to claim 5 wherein the antimicrobial coating composition comprises silver ions.

7. The ligating clip according to claim 5 wherein the antimicrobial coating composition comprises at least one of the compounds selected from the group consisting of selenium, copper, silver acetate, silver benzoate, silver carbonate, silver iodate, silver iodide, silver lactate, silver laurate, silver nitrate, silver oxide, silver palmitate, silver protein, and silver sulfadiazine.

8. The ligating clip of claim 5 wherein the antibiotic coating composition is selected from the group consisting of oxacillin, aminoglycosides, erythromycin, ciprofloxacin, cephalosporins, quinolones and vancomycin.

9. A ligating clip for use in a body comprising a ligating clip formed from a polymer material wherein the polymer material includes an antimicrobial or antibiotic composition.

10. The ligating clip according to claim 9 wherein the antimicrobial composition comprises at least one of the compounds selected from the group consisting of selenium, copper, silver acetate, silver benzoate, silver carbonate, silver iodate, silver iodide, silver lactate, silver laurate, silver nitrate, silver oxide, silver palmitate, silver protein, and silver sulfadiazine.

11. The ligating clip of claim 9 wherein the antibiotic composition is selected from the group consisting of oxacillin, aminoglycosides, erythromycin, ciprofloxacin, cephalosporins, quinolones and vancomycin.

12. A method for inhibiting the growth of or killing microorganisms comprising coating a ligating clip or a ligating clip applying instrument with an antimicrobial or antibiotic coating composition.

13. The method according to claim 12 wherein the antimicrobial coating composition comprises at least one of the compounds selected from the group consisting of selenium, copper, silver acetate, silver benzoate, silver carbonate, silver iodate, silver iodide, silver lactate, silver laurate, silver nitrate, silver oxide, silver palmitate, silver protein, and silver sulfadiazine.

14. The method of claim 12 wherein the antibiotic coating composition is selected from the group consisting of oxacillin, aminoglycosides, erythromycin, ciprofloxacin, cephalosporins, quinolones and vancomycin.

15. The method of claim 12 wherein the ligating clip is formed from a polymer.

16. The method of claim 12 wherein the ligating clip or ligating clip applying instrument is formed from a metal or a metal alloy.

17. The method of claim 12 wherein the ligating clip is formed from an absorbable material.

18. The method of claim 12 wherein the antimicrobial or antibiotic coating composition kills microorganisms by leaching into an area surrounding the ligating clip or ligating clip applying instrument, by contacting the microorganisms on a surface of the ligating clip or ligating clip applying instrument or by a combination thereof.

19. A method for inhibiting the growth of or killing microorganisms comprising incorporating an antimicrobial or antibiotic composition into the composition of a ligating clip or ligating clip applying instrument.

20. The method according to claim 19 wherein the antimicrobial composition comprises at least one of the compounds selected from the group consisting of selenium, copper, silver acetate, silver benzoate, silver carbonate, silver iodate, silver iodide, silver lactate, silver laurate, silver nitrate, silver oxide, silver palmitate, silver protein, and silver sulfadiazine.

21. The method of claim 19 wherein the antibiotic composition is selected from the group consisting of oxacillin, aminoglycosides, erythromycin, ciprofloxacin, cephalosporins, quinolones and vancomycin.

22. The method of claim 19 wherein the ligating clip is formed from a polymer or an absorbable material.

23. The method of claim 22 wherein the polymer is polyethylene terephthalate, polybutylene terephthalate, polyacetal, polytetrafluoroethylene, high density polyethylene, low density polyethylene, ethylene tetrafluoroethylene or polyoxymethylene.

24. A ligating clip for use in a body comprising a ligating clip formed from a metallic material wherein the metallic material includes an antimicrobial or antibiotic composition.

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